

DECISION RULE	Pros/Cons	DATA NEEDS	TIMELINE
Assume that SLVs or PRGs or RBNs are virtual RAOs (vs. screening values) for stormwater	Pros: <ul style="list-style-type: none"><li>- Clear and certain goalposts</li></ul> Cons: <ul style="list-style-type: none"><li>- Goalposts could change at different stages in the process</li><li>- Difficult to defend that those numbers are necessary to address risk or ARARs</li></ul>	Grab sample concentration data can be used initially.  If exceedences are detected in grab samples, a source may want to collect Even Mean Concentration (EMC) data to validate its representativeness	Grab Samples Data: Collected at most sites this year or next.  EMC Data: Sampling would likely start during the 07-08 water year. May require more than one year’s data.
Assume that the in-water risk associated with the concentration of COCs in stormwater can be determined through an equation we develop for that purpose	Pros: <ul style="list-style-type: none"><li>- All sources treated the same</li></ul> Cons: <ul style="list-style-type: none"><li>- Doesn’t take site specific conditions into account</li><li>- Unclear how we’d develop the equation or validate the results</li></ul>	??	
Assume that the in-water risk associated with the concentration of COCs in stormwater can be determined by the Fate and Transport model	Pros: <ul style="list-style-type: none"><li>- Model accounts for physical and chemical forces that determine the fate of stormwater loads in the river</li><li>- Model has been developed for this purpose and has the support of the interagency team (and LWG?)</li></ul> Cons: <ul style="list-style-type: none"><li>- Lack of empirical data to populate model and validate results</li><li>- Model can be critiqued from many angles and become an endless “do loop” if output is disputed</li></ul>	Fate and Transport model requires volume of runoff and concentration (totals). See below for options for generating this data	See below
QUANTIFY VOLUME OF RUNOFF			
Use “Simple Method”	Pros: <ul style="list-style-type: none"><li>- Useful tool for quantifying runoff from individual sites or groups of sites.</li><li>- Objective and well supported methodology</li></ul> Cons: <ul style="list-style-type: none"><li>-</li></ul>		Can be done at any time
Use City’s Grid model	Pros: <ul style="list-style-type: none"><li>- Standard runoff-type model that has been calibrated to better reflect local conditions</li><li>- Can generate seasonal or storm-specific runoff data that could be used in the Fate and Transport model</li></ul> Cons: <ul style="list-style-type: none"><li>- Uncertain about its utility for site specific evaluations</li><li>- Time and cost to do the work</li></ul>		Preliminary model runs currently being done  Additional modeling could conceivably be done at any time if COP determines this is a priority for their modeling team

Options for Evaluating Stormwater to Address Portland Harbor RI/FS Needs

DRAFT 8/29/06

Collect flow data	<div>Pros:<ul style="list-style-type: none"><li>- Useful for site specific evaluations</li><li>- Flow data is necessary for calculating EMCs, so it may be available for some sites</li></ul></div> <div>Cons:<ul style="list-style-type: none"><li>- Cost</li></ul></div>		Could begin collecting data at any time May require more than one year’s data
QUANTIFY CONCENTRATION OF CONTAMINANT IN STORMWATER RUNOFF			
Use literature values	<div>Pros:<ul style="list-style-type: none"><li>- Quick and easy (assuming comparable studies can be identified)</li></ul></div> <div>Cons:<ul style="list-style-type: none"><li>- Questions about whether it is representative of PH stormwater</li></ul></div>		Fall 2006
Use average of PH grab samples (for each COC, pool all grab sample data to calculate average)	<div>Pros:<ul style="list-style-type: none"><li>- Uses PH data</li><li>- Could be argued that pooled data bears a slight resemblance to random data which helps lend some credibility to it (?)</li></ul></div> <div>Cons:<ul style="list-style-type: none"><li>- Washes out the considerable variability that exists between outfalls</li><li>- Not very useful for regulatory purposes</li></ul></div>	Would need to dig into reports to pull out data.	May take a year or two before sufficient grab data is available
Collect Event Mean Concentration data at PH outfalls	<div>Pros:<ul style="list-style-type: none"><li>- Uses PH data</li><li>- More statistically sound approach</li></ul></div> <div>Cons:<ul style="list-style-type: none"><li>- Requires numerous samples to obtain representative results</li><li>- Data collection can be difficult and costly</li></ul></div>		Begin in 2007-2008 water year May take a few years to collect sufficient data for a site